



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY 153513

4630200005 - St. Clair
Sauget Sites (Area I) - Sauget
Superfund/General Correspondence

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December 9, 1993

The Honorable Paul Simon
United States Senator
3 West Old Capitol Plaza, Suite 1
Springfield, Illinois 62701

Dear Senator Simon:

Thank you for your letter of November 23, 1993 in which you requested information regarding Dead Creek in Cahokia, Illinois. The following information is to address the questions and concerns of your constituents, Richard and Diane McDonnell.

Studies have found "30 different chemicals" in Dead Creek:

Environmental studies have found contamination in Dead Creek, but the most significant problem from a human health standpoint is the PCB-contaminated sediment at the bottom of the creek bed. PCBs (Polychlorinated Biphenyls) do not move readily in groundwater, since they tend to bind tightly to soil particles. There might be an increased hazard if the sediment were to be transported downstream (through pumping from the creek-bottom, or opening the culvert at the creek-bottom under Judith Lane, for example). However, in the present situation, the greatest public health threat would occur if the creek were to **dry up** completely, allowing PCB-contaminated sediments in the creek bed to be carried by the wind or by animals into nearby residential yards. Such a development appears to be far in the future, at this point.

IEPA has submitted the Superfund "scoring package" for Sauget Sites Area I to U.S. EPA's Region V office, where it is under final review. This document is the basis for proposing the area containing Dead Creek for inclusion in the National Priorities List (NPL). The final package is expected to go to U.S. EPA headquarters this month, and the federal agency could formally propose Area I for the NPL as soon as the spring of 1994.

Eight-foot-high fence around part of Dead Creek"

True: In the 1980's U.S. EPA constructed a fence around Dead Creek Segment B (north of Judith Lane, to Queeny Ave., in Sauget), and around several other Sauget Sites (Site G, Site

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M, and Site L), in order to limit public access and prevent exposure of the public to the chemical contamination known to be present at those sites. In some cases the danger was not only direct contact, but also the possibility of consuming contaminated fish from these waters. Another purpose of constructing the fence was to prevent any continued dumping of wastes at the sites.

EPA "blocked the creek" at Judith Lane

IEPA has no formal record of how the culvert under Judith Lane came to be blocked. We believe that the culvert was probably blocked in the late 1960s or early 1970s in order to halt the further southward migration of contaminants that were known to be moving into the two northern segments of the creek from adjacent hazardous waste sites. It is not presently clear what governmental unit or private party actually ordered or carried out the blocking action, but the finding in more recent years of PCB contamination in sediments above Judith Lane (as well as those south of Judith) makes this action seem prudent today. The fact that the PCBs tend to stay with the sediment particles, however, suggests a remedy for the concerns expressed by area residents. If water could be pumped out of Segment B to the nearby American Bottoms wastewater treatment plant, without disturbing the PCB-contaminated sediments, the water level could be reduced.

Concerns about possible health hazards from odors in creek:

Responding to concerns expressed over the summer by area residents, IEPA sampled the creek water both above Judith Lane (9/24/93, 9/28/93, & 10/15/93) and below Judith (10/15/93) to make sure the water did not pose a significant public health threat. IEPA's Office of Chemical Safety (OCS) concluded that the contaminants present in the water would not pose a public health risk, but noted that certain chemicals (notably phenolics) that were characteristic of Site G (west of Dead Creek south of Queeny Ave.) were found above the very low odor threshold for these chemicals. Residents would smell these chemical odors at levels far too low to be harmful.

The Office of Chemical safety also noted that the levels of iron, lead, and phenolic compounds in the water exceeded State water quality standards and would be potentially damaging to fish and other aquatic species.

IEPA says not to drain the creek:

IEPA has long warned against disturbing the contaminated sediments in the creek, and the State has not had the funding

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that would have been needed to pay for pumping water from above Judith Lane into the American Bottoms treatment works. The IEPA has been open to that solution from the start of this unusual flooding event, but no party came forward with a workable way to get the water from the creek to the treatment works: no sewers existed nearby in Cahokia with the needed capacity.

However, as noted previously, based on both old and recent sampling, IEPA held the view that water could safely (from a human health standpoint) be pumped from this creek segment as long as the sediments were not disturbed. This could be accomplished by keeping the pump intake a sufficient height above the creek bed. Thus, the creek segment could not safely be pumped dry (not a desirable state anyway, since that would expose contaminated sediments), but it could be pumped down, considerably, to alleviate the flooding problem. Again, because tests of the water in Dead Creek north of Judith Lane have exceeded State water standards and could harm the environment, the IEPA has recommended the option of pumping the water to a treatment facility.

On November 16, 1993, after a particularly heavy series of storms, Mayor King, of Cahokia contacted IEPA to inform the Agency that Cahokia was starting to pump water from above Judith Lane to the next segment of Dead Creek. The mayor was informed that Cahokia was undertaking some risk of being drawn in as a Potentially Responsible Party if it were to be claimed in the future that this action had spread contamination from the area north of Judith Lane. IEPA also emphasized that recent tests of the surface water had shown levels of contamination that would violate state standards and might harm aquatic species if the water were not treated before being released to the environment. Cahokia officials were advised strongly to avoid placing the intake so as to disturb the contaminated sediments, however.

Further discussions with the mayor led to a phone conference with IEPA that concluded that no treatment process would be required for the emergency pumping to alleviate the flooding, based on IEPA's recent sampling results and the dilution with other runoff water prior to the water reaching the Mississippi River (see attached letter from Mayor King). The pumping continued for several days, was halted for several more, and was resumed when groundwater recharge apparently refilled the creek.

While the pumping continues, IEPA has periodically sampled the creek water. IEPA took a sample of the water being pumped from north of Judith Lane on 11/19/93 and found increased levels of phenolic compounds. Again, these levels do not indicate any human health risk, but they show an

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increased threat to aquatic organisms.

Perceived hazard to residents from water seepage into basements:

In response to concerns expressed by the McDonnell's, IEPA sampled the seepage water in their basement in June, 1993, and followed up on September 28 by re-sampling that basement, and five others near the creek that had seepage problems. Stan Black, of IEPA's Office of Community Relations, notified all the residents by phone on October 12 that the sample results had been quite normal for basement seepage water, posing no health risk to residents. IEPA sent residents copies of the lab results for their records on November 9 & 10, and the Illinois Department of Public Health (IDPH) sent letters to the residents explaining the results in health terms on November 24.

Property value concerns; Need to inform potential buyers:

Stan Black, of IEPA's Office of Community Relations, had indeed mentioned to Diane McDonnell in the course of a phone conversation that several realtors and/or appraisers from her area had called him to obtain information on contamination in the Dead Creek area. They had specifically mentioned that they had a professional "duty to inform" potential buyers in the area about possibly adverse factors that could affect property values. Part of the motivation for IEPA's effort to add Area I to the NPL is the desire to remedy the environmental problems in the area so that local residents will not need to be concerned about their effects on property values.

This response to your inquiry has been delayed by the fluidity of the Dead Creek situation. Indeed, matters have not yet reached a settled state, by any means. We are sending your office this response in order to be as complete as possible at this time, but we will also provide further updates as additional developments occur.

If I can be of further assistance, please do not hesitate to call.

Sincerely,

Mary A. Gade
Mary A. Gade
Director

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Enclosure

bcc: Stan Black
Paul Takacs

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